COGNITION

Gestalt laws

"The whole is more than the sum of its parts" (Kurt Kofka) is its maximum. The main authors of Gestalt proposed alternatives to the dominant psychological paradigms and made great contributions to cognitive psychology. (please refer gestalt principles in perception)

Gestalt – key ideas

- **EMERGENCE** - the whole is identified before the parts
- **REIFICATION** (our mind fills in the gaps)
- **MULTI-STABILITY** (the mind seeks to avoid uncertainty)
- **INVARIANCE** (we're good at recognizing similarities and differences)

Information Processing Model

The Information Processing Model is a framework used by cognitive psychologists to explain and describe mental processes. The model likens the thinking process to how a computer works. Just like a computer, the human mind takes in information, organizes and stores it to be retrieved at a later time. The main focus on the learning process is on biological changes in the brain and environmental influences.

George A. Miller outlined major concepts to information-processing

Basic principles to Miller's theory

Chunking – short-term memory can only comprehend 7 (plus or minus 2) chunks of information

Concepts of human processing: gathering and encoding information; retention of information; retrieval of information

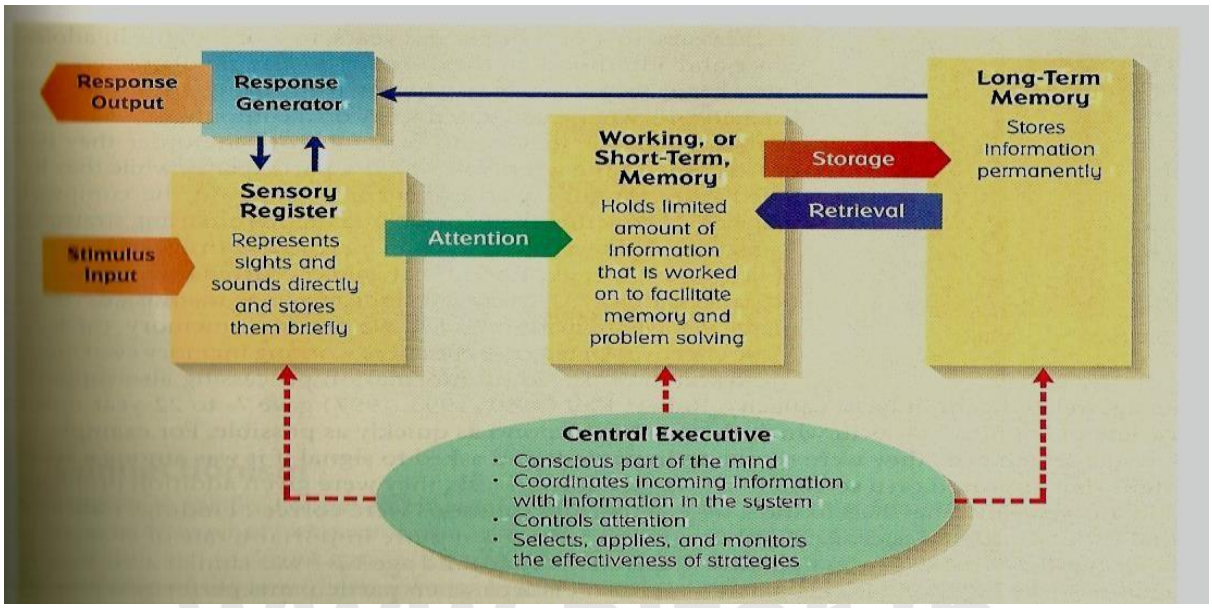
Atkinson and shifrin model

The multistore model of memory (also known as the modal model) was proposed by Atkinson and Shiffrin (1968) and is a structural model. They proposed that memory consisted of three stores: a sensory register, short-term memory (STM) and long-term memory (LTM). Information passes from store to store in a linear way, and has been described as an information processing model (like a computer) with an input, process

SHOUT
SHARE
IT

and output. Information is detected by the sense organs and enters the sensory memory. If attended to this information enters the short term memory.

Information from the short-term memory is transferred to the long-term memory only if that information is rehearsed (i.e. repeated). If maintenance rehearsal (repition) does not occur, then information is forgotten, and lost from short term memory through the processes of displacement or decay.


Response Output
Response Generator
Long-Term Memory
Stores information permanently
Working, or Short-Term, Memory
Holds limited amount of information that is worked on to facilitate memory and problem solving
Storage
Retrieval
Sensory Register
Represents sights and sounds directly and stores them briefly
Stimulus Input
Attention
Central Executive
Conscious part of the mind
Coordinates incoming information with information in the system
Controls attention
Selects, applies, and monitors the effectiveness of strategies

www.aiter.in

Feature integration model

Feature integration theory is a theory of attention developed in 1980 by Anne Treisman and Garry Gelade that suggests that when perceiving a stimulus, features are "registered early, automatically, and in parallel, while objects are identified separately" and at a later stage in processing. Feature integration theory is a theory of attention developed in 1980 by Anne Treisman and Garry Gelade that suggests that when perceiving a stimulus, features are "registered early, automatically, and in parallel, while objects are identified separately" and at a later stage in processing. The theory has been one of the most influential psychological models of human visual attention.

According to Treisman, the first stage of the feature integration theory is the preattentive stage. During this stage, different parts of the brain automatically gather information about basic features (colors, shape, movement) that are found in the visual field. The idea that features are automatically separated appears to be counterintuitive; however, we are not aware of this process because it occurs early in perceptual processing, before we become conscious of the object. The second stage of the feature

integration theory is the focused attention stage, where the individual features of an object combine in order to perceive the whole object. In order to combine the individual features of an object, attention is required and selection of that object occurs within a "master map" of locations.

The master map of locations contains all of the locations in which features have been detected, with each location in the master map having access to the multiple feature maps. When attention is focused at a particular location on the map, the features currently in that position are attended to and are stored in "object files". If the object is familiar, associations are made between the object and prior knowledge, which results in identification of that object.

www.aifer.in

UGC NTA NET PSYCHOLOGY

Aifer BEYOND PROMISES

For more helpful classes, study materials, mock tests:

9339 100 300

www.aifer.in education@aifer.in